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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,923	02/25/2004	Kang Soo Seo	1740-000086/US	4876
30593 7590 03/27/2008 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195				
EXAMINER ADEGEYE, OLUWASEUN				
ART UNIT 2621		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/786,923

**Applicant(s)**

SEO ET AL.

**Examiner**

OLUWASEUN A. ADEGEYE

**Art Unit**

2621

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02/25/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 1 - 21 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 2 and 4 – 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori et al (US 2002/0095531 A1) in view of De Haan (US 2003/0117529 A1).

As to **claim 1**, Mori in view of Haan discloses a method for recording graphic/subtitle data on a recording medium, comprising the steps of:

receiving video data (video signal) and additional data including graphic data and/or subtitle data (graphic signal) (see [79]); and

recording the additional data on the recording medium (DVD) by dividing and organizing the additional data in such a way that the additional data is included in a plurality of regions that will be overlaid on a video image constructed from the video data (see [79] and [80]).

However Mori does not disclose that the additional data is divided and organized into the plurality of regions based on positions where the additional data is to be displayed.

Haan discloses that the additional data (graphics information) is divided and organized into the plurality of regions (private stream 1 packets) based on positions where the additional data is to be displayed (see [28] and [29]. In the above paragraphs Haan discloses that the graphics information comprises time information (PTS) for the display of the graphics at particular positions during the playback of the video signal. Haan also discloses transmitting overlay information along with every new image).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the concept of additional data is divided and organized into the plurality of regions based on positions where the additional data is to be displayed taught by Haan to the method of Mori to provide that displaying the overlay information may be linked more with basic information (see [007]).

As to **claim 6**, Mori discloses a method for recording graphic/subtitle data on a recording medium, comprising the steps of:

receiving video data (video signal) and additional data including graphic data and/or subtitle data (graphic signal) (see [79]) ; and

recording the additional data as a plurality of individual parallel streams on the recording medium (see [28]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the concept of recording the additional data as a

plurality of individual parallel streams on the recording medium taught by Haan to the method of Mori to provide that displaying the overlay information may be linked more with basic information (see [007]).

As to **claim 9**, this is a computer readable claim corresponding to the method claim 1. Mori discloses a DVD (see [78]). Therefore, claim 9 is analyzed and rejected as previously discussed with respect to claim 1.

As to **claim 11**, this claim is similar to claim 9 only in that the limitation "and the computer readable medium having an information area storing information files for managing reproduction of the video data and the additional data" is additionally recited.

Haan discloses and the computer readable medium having an information area storing information files (time information) for managing reproduction of the video data and the additional data (see [28] and [29]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the concept of the computer readable medium having an information area storing information files for managing reproduction of the video data and the additional data taught by Haan to the method of Mori to provide that displaying the overlay information may be linked more with basic information (see [007]).

As to **claim 13**, this claim is similar to claim 1 only in that the limitation "third means for recording the additional data and the video data on the recording medium" is additionally recited. Haan discloses third means for recording the additional data and the video data on the recording medium (VCR) (see [28]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the concept of a third means for recording the additional data and video data taught by Haan to the method of Mori to provide that displaying the overlay information may be linked more with basic information (see [007]).

As to **claim 15**, grounds for rejecting claim 13 apply to claim 15 in its entirety.

As to **claim 18**, Mori discloses a method for reproducing a recording medium, comprising the steps of:

reproducing video data and additional data including graphic data and/or subtitle data recorded on the recording medium (see [79] – [80]);

decoding the reproduced video data to construct a main plane and decoding the additional data to construct a plurality of planes including presentation regions (see [79] and [80]); and

constructing a video image by mixing the main plane with the plurality of planes and outputting the constructed video image (see [79] – [80] and fig. 9).

However Mori does not disclose that the additional data is divided and organized into the plurality of regions based on positions where the additional data is to be displayed.

Haan discloses that the additional data (graphics information) is divided and organized into the plurality of regions (private stream 1 packets) based on positions where the additional data is to be displayed (see [28] and [29]. In the above paragraphs Haan discloses that the graphics information comprises time information (PTS) for the

display of the graphics at particular positions during the playback of the video signal. Haan also discloses transmitting overlay information along with every new image).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the concept of additional data is divided and organized into the plurality of regions based on positions where the additional data is to be displayed taught by Haan to the method of Mori to provide that displaying the overlay information may be linked more with basic information (see [007]).

As to **claim 21**, grounds for rejecting claim 18 apply to claim 21 in its entirety.

As to **claim 2**, Mori in view of Haan discloses the method set forth in claim 1. Mori discloses wherein the graphic data and subtitle data are organized into distinct regions (see [79] and [80]).

As to **claim 4**, Mori in view of Haan discloses the method set forth in claim 1. However Mori does not disclose wherein each of the plurality of regions includes at least one object.

Haan discloses wherein each of the plurality of regions includes at least one object (subtitle text) (see [11] and [27]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to added the step of wherein each of the plurality of regions includes at least one object taught by Haan to the apparatus of Mori so that the displaying the overlay information may be linked more with the basic information (see [007]).

As to **claim 5**, Mori in view of Haan discloses the method set forth in claim 4. However Mori does not disclose wherein the object is text, an icon, an image, or a background box.

Haan discloses wherein each of the plurality of regions includes at least one object (subtitle text) (see [11] and [27]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to added the step of wherein each of the plurality of regions includes at least one object taught by Haan to the apparatus of Mori so that the displaying the overlay information may be linked more with the basic information (see [007]).

As to **claim 7**, Mori in view of Haan discloses the method set forth in claim 6. Mori discloses wherein the number of the plurality of streams is the same as the number of graphic decoders contained in a reproducing apparatus (see [79] – [80] and fig. 9).

As to **claim 8**, Mori in view of Haan discloses the method set forth in claim 6. Mori discloses wherein parts of the additional data that should be simultaneously decoded are placed in distinct streams (see [79] – [80] and fig. 9).

As to **claim 10**, Mori in view of Haan discloses the high-density recording medium set forth in claim 9. Mori discloses wherein the graphic data and subtitle data are organized into distinct regions (see [79] – [80] and fig. 9).

As to **claim 12**, grounds for rejecting claim 8 apply to claim 12 in its entirety.

As to **claim 14**, grounds for rejecting claim 8 apply to claim 14 in its entirety.

As to **claim 16**, grounds for rejecting claim 7 apply to claim 16 in its entirety.



As to **claim 17**, grounds for rejecting claim 8 apply to claim 17 in its entirety.

As to **claim 19**, Mori in view of Haan discloses the method set forth in claim 18. Mori discloses wherein the plurality of planes include a subtitle plane and a graphic plane (see [79] – [80]).

As to **claim 20**, Mori in view of Haan discloses the method set forth in claim 19. Mori discloses wherein the subtitle plane includes decoded graphic data as well as decoded subtitle data (see [79] – [80]).

As to **claim 22**, Mori in view of Haan discloses the apparatus set forth in claim 21. Mori discloses wherein the second means organizes the additional data into a subtitle plane and a graphic plane (see [79] – [80]).

As to **claim 23**, Mori in view of Haan discloses the apparatus set forth in claim 22. Mori discloses wherein the second means organizes the subtitle plane such that the subtitle plane includes decoded graphic data as well as decoded subtitle data (see [79] – [80]).

As to **claim 24**, Mori in view of Haan discloses the method set forth in claim 1. Mori discloses wherein the graphic data and the subtitle data are decoded by different decoders (see [79] – [80] and fig. 9).

As to **claim 25**, grounds for rejecting claim 24 apply to claim 25 in its entirety.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mori in view of De Haan as applied to claims 1, 6, 9, 11, 13, 15, 18 and 21 above, and further in view of Nanba (US 2003/0081931 A1).

As to **claim 3**, Mori in view of De Haan discloses the method set forth in claim 1. However they do not disclose wherein the plurality of regions do not overlap with each other on the video image.

Nanba discloses wherein the plurality of regions do not overlap with each other on the video image (see [17], [28] and [137]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to added the step of not overlapping the plurality of regions taught by Nanba to the apparatus of Mori in view of De Haan to provide an easy-to-view display screen for users (see [42]).

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 2002/0081098 A1 discloses a plurality of decoders including a graphic decoder.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Inquiries***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUWASEUN A. ADEGEYE whose telephone number is (571)270-1711. The examiner can normally be reached on Monday - Friday 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on 571-272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Marsha D. Banks-Harold/

Supervisory Patent Examiner, Art Unit 2621

/O.A/